



312 File Number: **SESMOD2016100300824**

Filing Description

Question	Response
Description	E117WB Satellite Network

Satellite Information

Question	Response
Select Orbit Type	GSO
Space Station or Satellite Network Name	E117WB
Estimated Lifetime of Satellite(s) From Date of Launch	15 Years
Will the space station(s) operate on a Common Carrier basis?	No

Operating Frequency Bands (2)

Nature of service	Description	Frequency Band(s)	Mode Type
Fixed-Satellite Service		13750.0 MHz -14000.0 MHz	Receive
Fixed-Satellite Service		11450.0 MHz -11700.0 MHz	Transmit

Orbital Information For Geostationary Satellites

Section	Question	Response
Orbital Longitude Information	Orbital Longitude	117.0 degrees
	Hemisphere of Orbital Longitude	W
Longitudinal Tolerance or East /West Station-Keeping	Toward West	0.05 degrees
	Toward East	0.05 degrees
Inclination Excursion or North /South Station-Keeping Tolerance	Inclination Excursion or North /South Station-Keeping Tolerance	0.1 degrees
Antenna Axis Attitude Accuracy	Roll	0.1 degrees
	Pitch	0.1 degrees
	Yaw	0.1 degrees

Receiving Beams 1:

Question	Response
Beam ID	K5UV
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	11.0 dB/K
Min. Saturation Flux Density	-94.0 dBW/m2
Max. Saturation Flux Density	-72.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	-8 dB contour

Receiving Beams 2:

Question	Response
Beam ID	K5UH
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees

Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	11.0 dB/K
Min. Saturation Flux Density	-94.0 dBW/m2
Max. Saturation Flux Density	-72.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	-8 dB contour

Receiving Beams 3:

Question	Response
Beam ID	K1UV
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
G/T at Max. Gain Point	11.4 dB/K
Min. Saturation Flux Density	-94.0 dBW/m2
Max. Saturation Flux Density	-72.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	-8 dB contour

Receiving

Beams 4:

Question	Response
Beam ID	K1UH
Receive Beam Frequency	13750.0 MHz -14000.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
G/T at Max. Gain Point	11.4 dB/K
Min. Saturation Flux Density	-94.0 dBW/m ²
Max. Saturation Flux Density	-72.0 dBW/m ²
Co- or Cross Polar Mode	C
Service Area Description	-8 dB contour

**Receiving
Channels (5)**

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
U04	54.0	13900.0	Service Link
U03	36.0	13850.0	Service Link
U02	36.0	13810.0	Service Link
U01	36.0	13770.0	Service Link
U05	54.0	13960.0	Service Link

Transmitting Beams 1:

Question	Response
Beam ID	K5DV
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-20.0 dBW/Hz
Max. Transmit EIRP	54.6 dBW
Co- or Cross Polar Mode	C
Service Area Description	-8 dB contour

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
*	(dBW/m ²					
BW:	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-161.3	-159.1	-154.5	-150.8	-148.5	-146.4

Transmitting Beams 2:

Question	Response
Beam ID	K5DH
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz

Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-20.0 dBW/Hz
Max. Transmit EIRP	54.6 dBW
Co- or Cross Polar Mode	C
Service Area Description	-8 dB contour

Max. Power Flux Density

	* 0° - 5° (dBW/m ² /BW):	* 5° - 10° (dBW/m ² /BW):	* 10° - 15° (dBW/m ² /BW):	* 15° - 20° (dBW/m ² /BW):	* 20° - 25° (dBW/m ² /BW):	* 25° - 90° (dBW/m ² /BW):
4.0 kHz	-161.3	-159.1	-154.5	-150.8	-148.5	-146.4

Transmitting Beams 3:

Question	Response
Beam ID	K1DV
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	V
Peak Gain	dBi
Antenna Pointing Error	0.1 degrees

Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	90.0 degrees
Max. Transmit EIRP Density	-20.0 dBW/Hz
Max. Transmit EIRP	55.6 dBW
Co- or Cross Polar Mode	C
Service Area Description	-8 dB contour

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ²					
*	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0 kHz	-164.3	-163.1	-162.0	-161.9	-161.8	-146.3

Transmitting Beams 4:

Question	Response
Beam ID	K1DH
Transmit Beam Frequency	11450.0 MHz -11700.0 MHz
Beam Type	Fixed
Polarization	H
Peak Gain	dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	0.0 degrees
Max. Transmit EIRP Density	-20.0 dBW/Hz

Max. Transmit EIRP	55.6 dBW
Co- or Cross Polar Mode	C
Service Area Description	-8 dB contour

Max. Power Flux Density

	* 0° - 5°	* 5° - 10°	* 10° - 15°	* 15° - 20°	* 20° - 25°	* 25° - 90°
	(dBW/m ²					
*	/BW):	/BW):	/BW):	/BW):	/BW):	/BW):
4.0	-164.3	-163.1	-162.0	-161.9	-161.8	-146.3
kHz						

Transmitting Channels (5)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
D01	36.0	11480.0	Service Link
D04	54.0	11610.0	Service Link
D03	36.0	11560.0	Service Link
D02	36.0	11520.0	Service Link
D05	54.0	11670.0	Service Link

Certification Questions

Question	Response
<p>Are the applicable service area coverage requirements of 25.143(b)(2) (ii) and (iii), or 25.144(a)(3)(i), or 25.145 (c)(1) and (2), or 25.146(i)(1) and (2), or 25.148(c), or 25.225 met?</p>	<p>N/A</p>
<p>Are the applicable frequency tolerances of 25.202(e) and out-of-band emission limits of 25.202(f)(1),(2), and (3) met?</p>	<p>Yes</p>
<p>Are the cessation of emissions requirements of 25.207 met?</p>	<p>Yes</p>
<p>Are the applicable power-flux-density limits of 25.208 met, and is the appropriate technical showing provided within the application?</p>	<p>Yes</p>
<p>For NGSO applications, are the applicable equivalent-power-flux-density limits of 25.208 met, and is the appropriate technical showing provided within the application?</p>	<p>N/A</p>
<p>Are the applicable full-frequency-reuse requirements of 25.210 met?</p>	<p>Yes</p>
<p>If the application is for a 17/24 GHz BSS space station, will it be operated at an offset location with full power and interference protection in accordance with 25.262(b)?</p>	

Attachments

Information not provided.